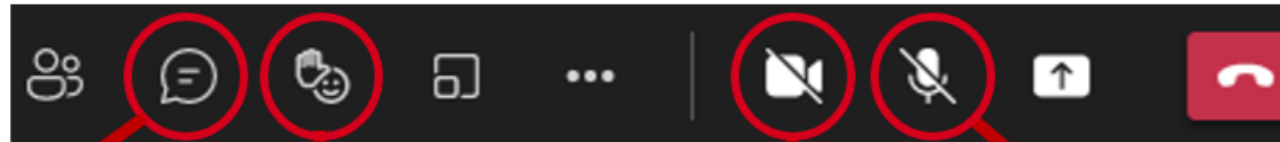




Potential policy framework for the promotion of sustainable ODS/HFC banks management - Insights into the new COPA publication
27 November 2023

GROUND RULES FOR ONLINE SESSIONS



Use the chat for your questions.

You can use this feature for reactions or for raising your virtual hand.

If the connection allows it, please turn on your video when you speak

For best audio quality, please stay muted.

- Please **use headphones** or **earphones** in order to prevent echoing-effects

AGENDA

Welcome Remarks	Ellen Michel, GIZ; COPA Secretariat & Ken Logan, A-Gas; Co-Coordinator Thematic Working Group Policy Framework
Presentation of the study „Potential policy framework for the promotion of sustainable ODS/HFC banks management”	Irene Papst, HEAT GmbH
Q&A	All participants



1. Opening
Ellen Michel, GIZ

INTRODUCTION

Approach

COPA works jointly with partner countries and diverse actors across private and public sectors to advance the holistic solutions needed to reduce ODS and HFC banks, and ultimately complete the shift in the cooling sector to sustainable refrigerant management.

Implemented by:



In cooperation with:



Supported by:



on the basis of a decision
by the German Bundestag

ODS AND HFC BANKS MANAGEMENT

the gap

Due to a general **lack of appropriate regulatory frameworks, financial means as well as infrastructure**, the collection, reclamation or destruction of waste containing ODS and HFC presents a major challenge.



CLIMATE AND OZONE PROTECTION ALLIANCE (COPA)

Activities

COPA works jointly with partner countries and diverse actors across private and public sectors to advance the holistic solutions needed to **reduce ODS and HFC banks**, and ultimately complete the shift in the cooling sector to **sustainable refrigerant management**.



Implemented by:



In cooperation with:



Supported by:



on the basis of a decision by the German Bundestag

COUNTRY MEMBERS

Africa

Asia



**Latin
America
and
Caribbean**

NON-COUNTRY MEMBERS



SET ALLIANCE





1. Thematic Working Group Policy Frameworks

Ken Logan, A-Gas



2.

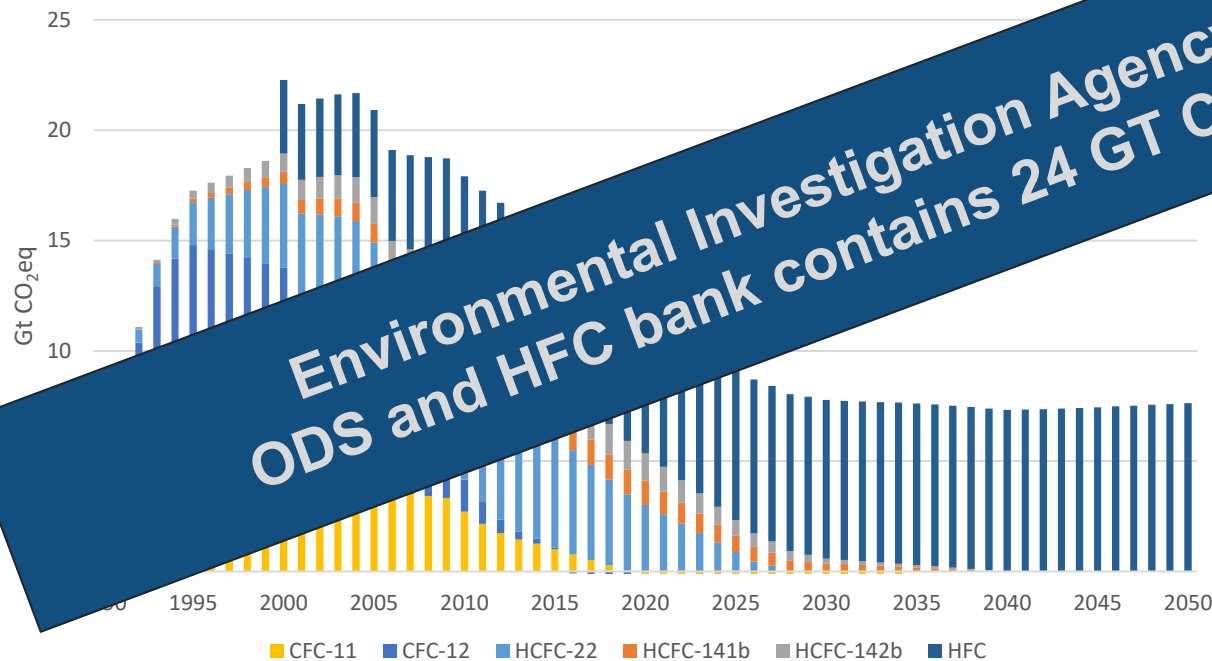
Presentation of the study "Potential policy framework for the promotion of sustainable ODS/HFC banks management "

Irene Papst, HEAT GmbH

CONTENT

1. Goals of sustainable ODS/HFC banks management
2. Relevant international agreements
 - Montreal Protocol
 - Paris Agreement and NDCs
 - Basel Convention
3. Relevant national policy interventions
 - Market entrance
 - Containment and recycling
 - Collection, reclamation and destruction
 - Market guidance

GLOBAL ODS AND HFC BANKS



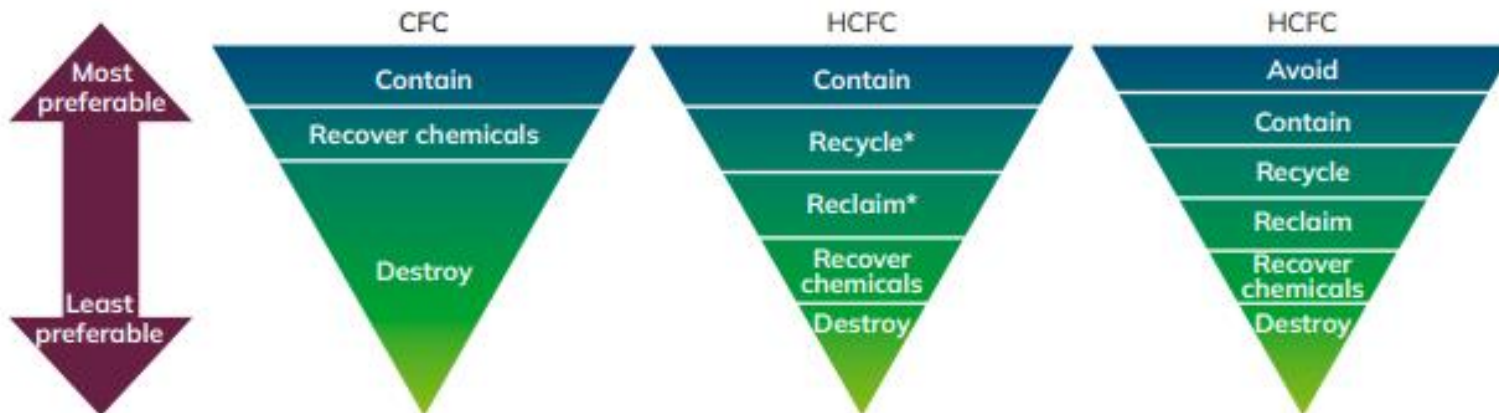
24 Gt CO₂eq ODS
 19.3 Gt CO₂eq HFC
 (2016)

4.7 Gt CO₂eq ODS
 6.5 Gt CO₂eq HFC
 (2021)

Source: [Global ODS Banks: A country-level estimate \(2018\)](#)

ODS/HFC BANKS MANAGEMENT HIERARCHY

Figure 1. ODS/HFC Bank Management Hierarchy.



**Recycling and Reclaim of HCFCs should be subject to a cutoff date that is aligned with the phase-out of HCFCs*

Source: HEAT 2023

INTERNATIONAL AGREEMENTS: THE MONTREAL PROTOCOL

- ODS/HFC banks management is not relevant for compliance
- Apart from dedicated funding windows, no systematic support for the sustainable management of banks
- The current funding window provides assistance to establish ODS/HFC banks inventories and define management plans
- The focus of the MP is consumption reduction, not emission control
- The definition of production (and thus consumption) **allows to deduct destroyed amounts of substances to determine the calculated levels.** This may lead to a perverse incentive:
- Where consumption is still allowed, destroyed amounts can be replaced by virgin substances

INTERNATIONAL AGREEMENTS: THE MONTREAL PROTOCOL

Barrier	Possible policy option to overcome barrier
<p>Perverse incentive to add virgin substances for destroyed amounts for substances whose consumption is still allowed (HCFC and HFC)</p>	<p>Policy to not add destroyed amounts to allowed consumption (national or international level)</p> <p>Regulation imposing and enforcing mandatory containment provisions</p>
<p>Reclaimed amounts are not deducted from allowed consumption, hence the overall domestic consumption might increase due to reclamation</p>	<p>Imposing continuously decreasing level of allowed consumption creates an economic incentive for reclamation</p> <p>Cut-off date for reclamation in alignment with phase-out schedules, to avoid extending the lifetime of equipment.</p>

INTERNATIONAL AGREEMENTS: PARIS AGREEMENT AND THE NDCS

- HFCs are part of the greenhouse gases covered under the 2006 IPCC Guideline for national GHG inventories
- HFC emissions are reported in National Inventory Reports
- If HFC emissions are covered by NDC targets, their reporting within the NIR is mandatory
- ODS emissions are not reported within the NIR but might be included in an NDC as non-GHG gas. No guidance on how to report on such efforts.

INTERNATIONAL AGREEMENTS: THE PARIS AGREEMENT AND THE NDCS

Barrier	Possible policy option to overcome barrier
Different requirements for reporting of HFCs under MOP, PA and NDCs/ETF	Guidelines would facilitate data collection and reporting of these substances, specifically for developing countries
No mandatory or clear requirement for reporting of ODS emission reduction in NDCs	Guidance, possibly mandatory, on ODS emission report and their potential inclusion as non-GHG gas in the NDC
Double counting of HFC destruction is built into current reporting procedures	Implement provision for reporting of import and export of HFC intended for destruction within national GHG accounting
Unclear reporting requirements for inclusion of ODS and HFC emission (reduction)	Development of standardized reporting procedures of ODS and HFC emission (reduction) for NDCs/ETF on the basis of MP data

INTERNATIONAL AGREEMENTS: ODS/HFC BANK MANAGEMENT AND THE CARBON MARKETS

Possible policy requirements to support sustainable ODS/HFC bank management

Commitment to work on a whole subsector or a defined region and increase recovery and treatment, instead of focusing on already collected amounts of substances.

Work with local technicians and train them in good practices.

Agree on an MRV system that accurately reflects the project activities and reduces the chances for fraud by documenting the work of the individual technician and follows the substances along the collection chain.

Agree on the usage of earned emission reduction and necessary corresponding adjustments.

Develop an MRV system where the project activity can serve as a pilot for enforcement authorities to be scaled up to the whole sector later on.

Define an exit strategy after the agreed crediting period, where additionality ends and project experience is used to implement a regulated system.

INTERNATIONAL AGREEMENTS: BASEL CONVENTION

Unwanted ODS and HFC are classified as hazardous waste. Their export for destruction requires to follow the Prior Informed Consent (PIC) procedure under the Basel Convention:

The destination country and all transit countries need to approve the movement of the waste ODS/HFC prior to its shipment.

Depending on the (transit) countries, several waste definitions might be applicable for the same shipment and several authorities might be involved within each single country to approve the shipment.

INTERNATIONAL AGREEMENTS: BASEL CONVENTION

Barrier	Possible policy option to overcome barrier
<p>Administrative complex and time-consuming process to comply with PIC, which delay or hinder TBM of ODS and HFC heading for destruction facilities</p>	<p>Basel Convention implementation of a streamlined procedure for ODS/HFC export for destruction or reclamation</p> <p>Potentially enhance the process above by approving a “white-list” of pre-consented facilities on national level, similar to what is custom in the OECD control system</p>

NATIONAL POLICIES: CONTAINMENT AND RECYCLING

Policy interventions	Examples of implementation
Venting ban for ODS/HFC	EU F-Gas regulation Art. 3: “The intentional release [...] shall be prohibited [...].”
Legal obligation for operators to provide for recovery	EU F-Gas regulation Art. 8: “Operators of equipment [...] shall ensure that the recovery [...] is carried out [...] so that those gases are recycled, reclaimed or destroyed.”
Provisions for regular system tightness checks and prompt repair of detected leaks	EU F-Gas regulation Art. 4: “Operators of equipment [...] shall ensure that the equipment is checked for leaks.”
Technician training (curriculum) and certification for proper handling practices	<ul style="list-style-type: none"> ➔ Fit for Green cooling ➔ Case study Indonesia (Resource Book for Life Cycle Management of Fluorocarbons)
Support for procurement of required tools for technicians for recovery and recycling	This is often done as part of HPMPs or KIPs with financial assistance from the MLF
Operators’ registry	➔ Case Study on Poland’s system (MRV Handbook)

NATIONAL POLICIES: COLLECTION, RECLAMATION AND DESTRUCTION

Policy interventions	Examples of implementation
Obligation for substance distributors to take back (their) used substances (or equivalent amount)	German law on circular economy (Kreislaufwirtschaftsgesetz, KrWG, 2020), Article 4
Support for cylinder logistic system	Could be part of HPMP/KIP activities, depending on a country's preference
Cut-off date for reclaim of ODS and high GWP HFCs	No example known
(Financial) Incentive scheme for technicians to return used and collected refrigerants to reclamation facilities /collection utilities.	Norway, Denmark, Slovenia, Spain → Case study Norway and Denmark (Resource Book for Life Cycle Management of Fluorocarbons)
Enforcement by introducing a tracking system of refrigerants, providing information of large amounts of refrigerants being lost	Slovakia's leaklog system → Case Study on Slovakia's system (Resource Book for Life Cycle Management of Fluorocarbons)

NATIONAL POLICIES: MARKET GUIDANCE

Further resources

The Green Cooling Initiative guidelines for policymakers (Nov. 2022) “Raising ambition in NDCs through holistic mitigation approaches in the cooling sector” offers a variety of options to provide market guidance, presented for three country groups with varying starting points and ambition levels.

Financial incentives for market guidance are described in COPA’s paper on financing and fundraising. Examples include financial incentives for the collection of ODS and HFC by a rebate system, hence giving the collected substances an economic value.

NATIONAL POLICIES: EXTENDED PRODUCER RESPONSIBILITY

Barrier	Possible policy option to overcome barrier
Second-hand imports of appliances from other countries detach the responsibility from producers	Clear import regulations with requirements for energy efficiency and refrigerant avoiding the import of obsolete equipment
Unclear burden of responsibility sharing for imported products among the importers	Complete and central import reporting enables transparent burden sharing
Domestic second hand-market dealers are not included in the original EPR systems	Second-hand dealers could be included in EPR systems by contributing to the system relative to their number of re-sold equipment

THANK YOU FOR YOUR ATTENTION

Irene Papst

Member of COPA's Steering Committee

Senior Consultant at Heat GmbH

Irene.Papst@heat-international.de



3. Q&A
All participants

BECOME A MEMBER

Find more Information on our [Website](#)



Members gain access to a global network of knowledge and resources
Match-making between actors will be enabled and a flexible array of services provided.

The network will amplify the reach of actors and enhance the impact of activities in the field of ODS and HFC banks management.

COPA is open to all countries and organisations, willing to support the global shift to sustainable refrigerant management and closing the loop to a circular economy in the cooling sector.

Join COPA and become a member

CLIMATE AND OZONE PROTECTION ALLIANCE (COPA)

Thematic Working Groups (TWG)

Together with our partners and members, we are working on the following topics in dedicated
**THEMATIC
WORKING GROUPS**



Policy Framework

For an effective management of refrigerants and foams at end-of-life, **suitable policy measures are required** like venting bans or mandatory recovery



Technology Solutions

Working towards the **best technical solutions** for ODS and HFC recovery, reclamation and destruction



Financing Mechanism

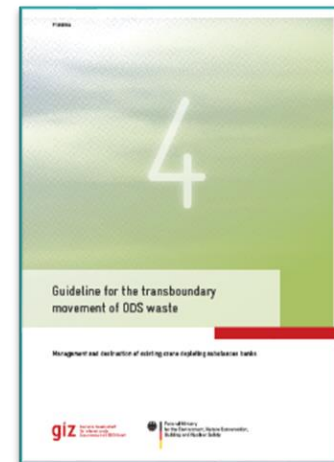
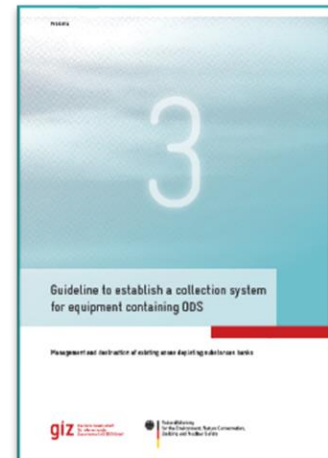
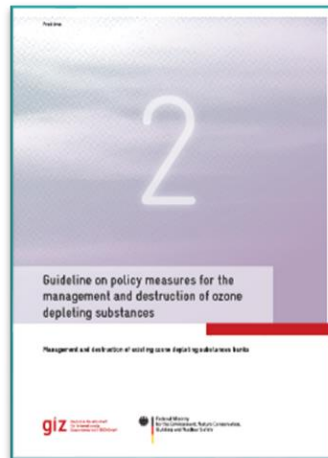
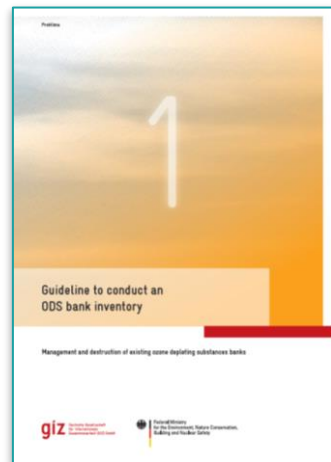
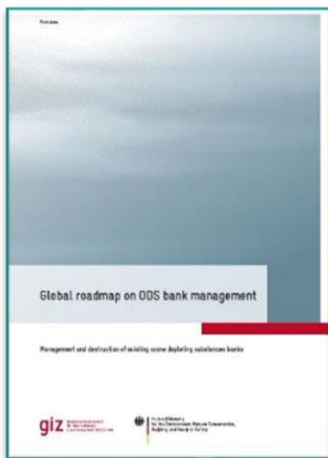
The infrastructure for and operation of a collection scheme and the destruction or reclamation of ODS and HFCs needs to be based on a **sustainable financing mechanism**



Implementation Models

Putting theory into practice and demonstrating how sustainable refrigerant management can be implemented

RELEVANT PUBLICATIONS AND TOOLS



Global roadmap on
ODS bank
management
([Download](#))

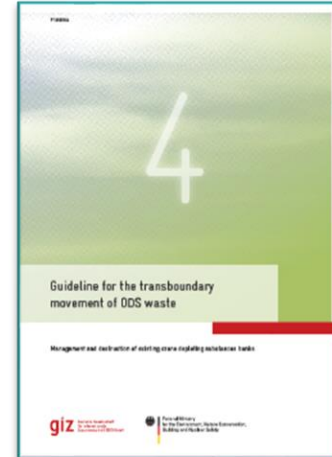
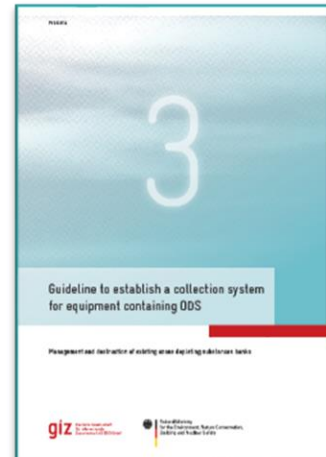
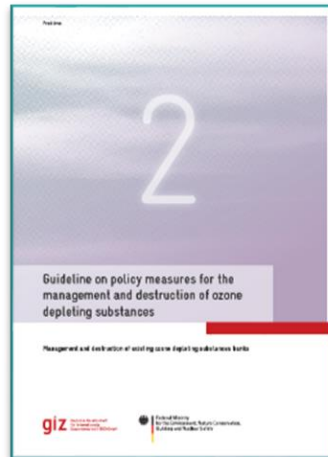
Guideline to conduct
an ODS bank
inventory ([Download](#))

Guideline on policy
measures for the
management and
destruction of ODS
([Download](#))

Guideline to establish
a collection system
for equipment
containing ODS
([Download](#))

Guideline for the
transboundary
movement of ODS
waste ([Download](#))

RELEVANT PUBLICATIONS AND TOOLS



Global roadmap on ODS bank management ([Download](#))

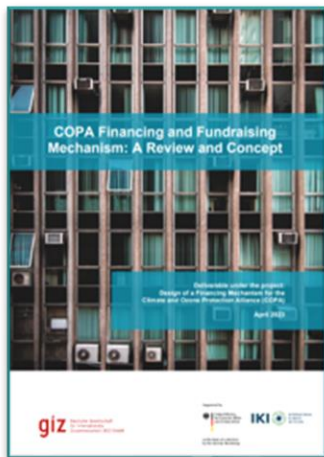
Updated Guideline to conduct an ODS and HFC bank inventory ([Download](#))

Guideline on policy measures for the management and destruction of ODS ([Download](#))

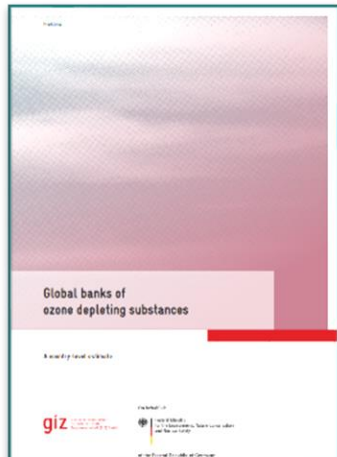
Guideline to establish a collection system for equipment containing ODS ([Download](#))

Guideline for the transboundary movement of ODS waste ([Download](#))

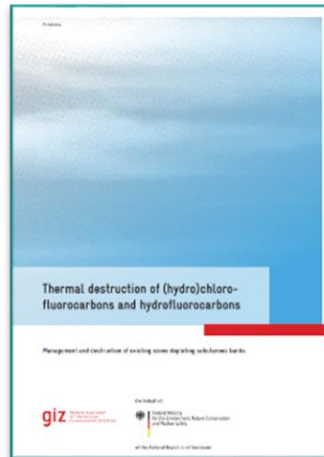
RELEVANT PUBLICATIONS AND TOOLS



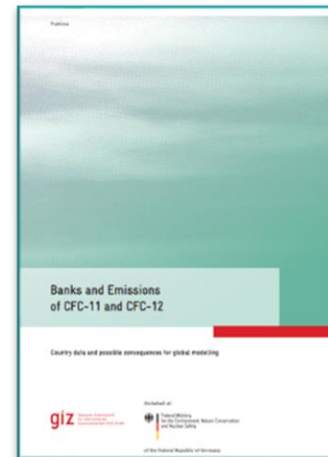
Design of a Financing Mechanism for the Climate and Ozone Protection Alliance
[\(Download\)](#)



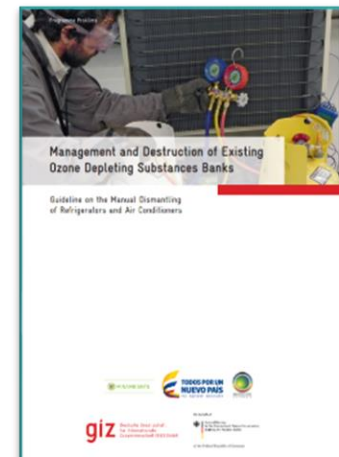
Global Banks of ozone depleting substances.
A country-level estimate
[\(Download\)](#)



Thermal destruction of (H)CFCs and HFCs
[\(Download\)](#)

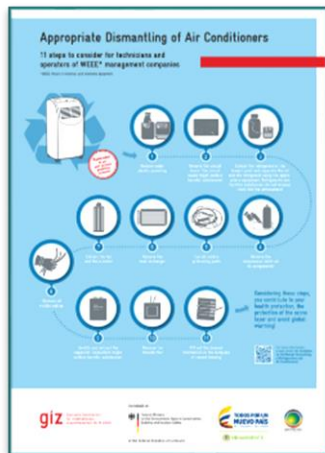
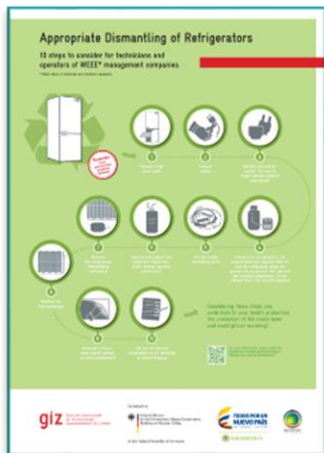


Banks and Emissions of CFC-11 and CFC-12
[\(Download\)](#)



Guideline on the Manual Dismantling of Refrigerators and Air Conditioners
[\(Download\)](#)

RELEVANT PUBLICATIONS AND TOOLS



Poster: Appropriate Dismantling of Refrigerators ([Download](#))

Poster: Appropriate Dismantling of Air Conditioners ([Download](#))

Poster: Key processes to manage ODS banks ([Download](#))

Video: ODS Banks – An unseen threat ([Download](#))

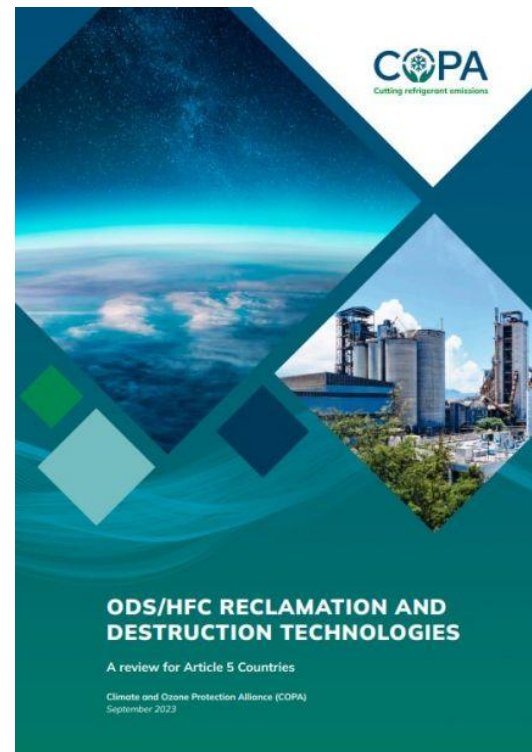
Video: A simple step with great impact: The reclaim process of refrigerants ([Download](#))

NEXT WEBINAR

ODS/HFC Reclamation and Destruction
Technologies: A review for Article 5 countries
- Insights into new COPA publication

Date, Time

Register here



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THANK YOU FOR YOUR PARTICIPATION